CUSTOMER NO.: 38107

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of G. GEGNER	)	Examiner: C. HARRISON
Serial No.: 10/516,376	)	Art Unit: 2628
Filed: November 30, 2004	)	Confirmation: 1408
For: **METHOD AND OPTIMIZING THE PRESENTATION ON A DISPLAY SCREEN OF OBJECTS OF A USER INTERFACE WHICH CAN BE FREELY POSITIONED AND SCALED BY MEANS OF CONTROL ELEMENTS**	)	
Date of Last Office Action: June 8, 2009	)	
Attorney Docket No.: PHDE020139US/PKRZ 2 01244	)	Cleveland, OH 44114 December 7, 2009

APPEAL BRIEF

Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This is an Appeal from the Final Rejection of June 8, 2009.

A Notice of Appeal and fee were filed October 8, 2009.

The Appeal Brief submission fee is being submitted herewith.

CERTIFICATE OF ELECTRONIC TRANSMISSION

I certify that this Appeal Brief and accompanying documents in connection with U.S. Serial No. 10/516,376 are being filed on the date indicated below by electronic transmission with the United States Patent and Trademark Office via the electronic filing system (EFS-Web).

Dec 07 2009 — Patricia A Heim

Date — Patricia A. Heim

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(i) REAL PARTY IN INTEREST

The Real Party in Interest is the Assignee, KONINKLIJKE PHILIPS ELECTRONICS, N.V.

(ii) RELATED APPEALS AND INTERFERENCES

None

(iii) STATUS OF CLAIMS

An Amendment accompanies this Brief to address and, it is believed, resolve the 35 U.S.C. § 112 issues regarding claim 4 and to amend claim 4 by incorporating subject matter from dependent claims 27 and 28 which were indicated as containing allowable subject matter.

If the accompanying Amendment is entered, then the status of the claims is as follows:

Claims 2-4, 6-7, 9,16-19, 21-26, and 29-31 are pending in this application.

Claims 1, 5, 8, 10-15, 20, and 27-28 have been cancelled

Claims 2, 3, 7, 19, 22-26, 30, and 31 stand rejected.

Claims 4, 6, 9, 16-19, 21 and 29 stand allowed.

Claims 2, 3, 7, 19, 22-26, 30, and 31 are being appealed.

If the Amendment is not entered:

Claims 2-4, 6-7, 9,16-19, and 21-31 are pending in this application

Claims 1, 5, 8, 10-15, and 20 have been cancelled

Claims 2-4, 6, 7, 9, 16-19, 21-26, 30, and 31 stand rejected.

Claims 27-29 are objected to as depending from a rejected claim, but are indicated as containing allowable subject matter.

No claims stand allowed, confirmed or withdrawn.

Claims 2-4, 6, 7, 9, 16-19 and 21-31 are being appealed.

(iv) STATUS OF AMENDMENTS

The only Amendment filed subsequent to the Final Rejection is that which accompanies this Brief. Because the accompanying Amendment reduces the issues on Appeal and raises no issues that would require further search or consideration, it is believe that this Amendment will be entered.

(v) SUMMARY OF CLAIMED SUBJECT MATTER

2. The method as claimed in claim 22, wherein the objects are arranged within a fixed hierarchy in order to enable substituting objects based on relative hierarchical level. **{p. 3, l. 18-21; p. 8, l. 21-26; p. 11, l. 11-13}**

3. A method of optimizing the presentation on a display screen of objects of a user interface which can be freely positioned and scaled by means of control elements by means of a predetermined calculation rule in such a manner that the objects can be automatically changed, in dependence on object contents, selected preferred settings and available display resource on the display screen, between a minimum readable size and a selected maximum size in such a manner that optimum filling of the available display screen surface is achieved, while suppressing less important details of the object contents and while changing the mode of display of the object contents and/or the object as well as while avoiding mutual overlapping of the objects, wherein the objects are ordered in a hierarchy, an ordering of the hierarchy of combined objects can be changed. **{p. 2, l. 27 – p. 3, l. 21; p. 6, l. 27 – p. 9, l. 6; Figs. 1-7}**

4. A method of optimizing the presentation on a display screen of objects of a user interface, the method comprising:

generating a plurality of objects, each object containing patient information from a medical measuring device; **{p. 2, l. 27 – p. 3, l. 12; p. 6, l. 10-21; p. 6, l. 27 – p. 9, l. 6}**

positioning and scaling the control elements with a predetermined calculation rule to form at least a first group of objects corresponding to a first patient and a second group of objects corresponding to a second patient in such a manner that the objects can be automatically changed, in dependence on object contents, selected preferred settings and available display resource on the display screen, between a minimum readable size and a selected maximum size in such a manner that optimum filling of the available display screen surface is achieved, while avoiding mutual overlapping of the objects; **{p. 2, l. 27 – p. 3, l. 32; p. 6, l. 27 – p. 9, l. 6; Figs. 1-7}**

displaying the first and second groups of objects on a display device. **{p. 2, l. 27 – p. 3, l. 2; p. 8, l. 21-26}**

6. The method as claimed in claim 4, further including:

automatically substituting the objects among themselves. **{p. 8, l. 14-20; p. 11, l. 25-27}**

7. A method of optimizing the presentation on a display screen of objects of a user interface which can be freely positioned and scaled by control elements by a predetermined calculation rule in such a manner that the objects can be automatically changed, in dependence on object contents, selected preferred settings, and available display resources on the display screen, between a minimum readable size and a selected maximum size in such a manner that optimum filling of an available display screen surface is achieved, while suppressing less important details of the object contents and while changing the mode of display of the object contents and/or the object as well as while avoiding mutual overlapping of the objects, wherein the contents of an object contain static information as well as dynamically variable information and/or commands and various options for processing/manipulation, wherein the objects can temporarily be displayed in enlarged form in dependence on a given trigger signal which is produced by a control element which is defined by object selection/object marking. **{p. 2, l. 27 – p. 3, l. 12; p. 3, l. 33 – p. 4, l. 27; p. 6, l. 27 – p. 9, l. 6; Figs. 1-7}**

9. The method as claimed in claim 7, wherein respective rectangular surfaces are provided for the display of the objects on the display screen. **{p. 6, l. 1-4; p. 12, l. 9-11}**

16. The method as claimed in claim 4, further including:

generating a cursor on the display screen; **{p. 4, l. 15-26; p. 6, l. 5-9; p. 6, l. 22-26; p. 8, l. 14-20}**

with the cursor, designating one of the objects; and, **{p. 8, l. 27-32}**

temporarily enlarging the designated object. **{p. 4, l. 15-21; p. 6, l. 5-9; p. 8, l. 27-32}**

17. The method as claimed in claim 4, further including:

in response to one of the objects ceasing to contain relevant patient monitoring information, automatically, without user intervention, substituting another object for the one object. **{p. 6, l. 27 – p. 7, l. 13; p. 11, l. 25-26}**

18. The method as claimed in claim 17, further including:

when another object is substituted, automatically repositioning and rescaling the objects using the calculation rule. **{p. 6, l. 27 – p. 7, l. 34; p. 8, l. 7-34}**

19. The method as claimed in claim 7, wherein the trigger signal is produced by a cursor touching one of the objects, such that one of the objects is temporarily enlarged when it is being touched by the cursor and returns to its original size when the cursor no longer touches the one of the objects. **{p. 8, l. 27-32}**

21. The device as claimed in claim 20, wherein the briefly enlarged object contains patient monitoring information. **{p. 3, l. 7-11; p. 6, l. 10-34; p. 6, l. 10-21; p. 8, l. 1-13}**

22. A method of optimizing a presentation of static and dynamic objects containing patient monitoring information, the method comprising:

generating a plurality of objects, each object containing patient monitoring information from a medical measuring device; **{p. 3, l. 6-32; p. 6, l. 10-21; p. 7, l. 14-24; p. 12, l. 13-15; Figs 1-7}**

positioning and scaling the objects in a group using a calculation rule in such a manner that the objects are automatically changeable in dependence on object contents, selected settings and available display resources on a display screen while avoiding overlapping objects; **{p. 6, l. 27 – p. 9, l. 6}**

in response to one of the objects ceasing to contain relevant patient monitoring information, automatically, without user intervention, substituting another object and repositioning and rescaling the displayed objects using the calculation rule. **{p. 6, l. 27 – p. 7, l. 13; p. 11, l. 25-26}**

23. The method as claimed in claim 22, further including:

generating a cursor on the display screen; **{p. 4, l. 15-26; p. 6, l. 5-26; p. 8, l. 14-20}**

moving the cursor on the display screen using a user input device; **{p. 4, l. 15-26; p. 8, l. 27}**

in response to touching an object with the cursor, temporarily enlarging the touched object. **{p. 4, l. 15-21; p. 6, l. 5-9; p. 8, l. 27-32}**

24. The method as claimed in claim 3, wherein the objects are windows which contain patient monitoring information. **{p. 3, l. 7-11; p. 6, l. 10-17; Figs. 1-7}**

25. The method as claimed in claim 3, further including:

designating an object; **{p. 8, l. 27-32}**

enlarging the designated object; **{p. 4, l. 15-21; p. 6, l. 5-9; p. 8, l. 27-32}**

resizing the other objects to avoid overlapping without reducing the other objects below the minimum readable size. **{p. 6, l. 5-9; p. 6, l. 27-34; p. 7, l. 20-24; p. 8, l. 27-32}**

26. The method as claimed in claim 25, further including:

suppressing detail in the other objects to maintain the minimum readable size. **{p. 6, l. 27-34; p. 7, l. 20-34; p. 8, l. 7-13}**

27. The method as claimed in claim 4, further including:

resizing the objects of the first groups relative to the objects of the second group. **{p. 8, l. 19 – p. 9, l 6}**

28. The method as claimed in claim 4, further including:

designating one of the groups; **{p. 8, l. 7-10}**

enlarging the objects of the designated group. **{p. 8, l. 19 – p. 9, l. 6}**

29. The method as claimed in claim 7, wherein a first group of the objects contain information from a first patient and a second group of the objects contained information from a second patient and further including:

selecting one of the first and second groups; **{p. 8, l. 19 – p. 9, l. 6}**

scaling the objects of the selected group relative to the other group by said predetermined calculation rule. **{p. 8, l. 19 – p. 9, l. 6}**

30. The method as claimed in claim 7, wherein the objects are windows which contain patient monitoring information. **{p. 3, l. 7-11; p. 6, l. 10-18; p. 11, l. 13-15}**

31. A device for optimizing a presentation of static and dynamic objects containing dynamically varying patient data, the device comprising:

a display screen; **{p. 4, l. 22-25; p. 5, l. 32-34; p. 6, l. 1-4; Figs 1-7}**

an interface which receives dynamically varying patient data and displays the patient data in objects on the display screen, the interface implementing a calculation rule to: **{p. 4, l. 27 – p. 5, l. 7; p. 6, l. 5-9; p. 6, l. 27 – p. 9, l. 6}**

substitute, reposition, and rescale the displayed objects in response to one of the displayed objects ceasing to contain relevant patient data, and **{p. 6, l. 27 – p. 9, l. 6}**

position and scale the displayed objects using the calculation rule to automatically change object contents, settings, and available resources on the display screen, and **{p. 6, l. 27 – p. 9, l. 6}**

avoid overlapping of the displayed objects. **{p. 5, l. 1; p. 6, l. 28-34; p. 12, l. 17-24}**

(vi) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 3, 25, and 26 are anticipated, in the sense of 35 U.S.C. § 102, over McComb (US 6,111,573).

Whether claim 24 is obvious, in the sense of 35 U.S.C. § 103, over McComb as modified by Hochstedler (US 6,707,476).

Whether claims 7, 9, 21, and 30 distinguish patentably, in the sense of 35 U.S.C. § 103 over McComb in view of Hochstedler.

Whether claim 19 distinguishes patentably, in the sense of 35 U.S.C. § 103, over McComb as modified by Hochstedler, as further modified by Ellis (US 2003/0210281).

Whether claim 22 and claim 2 dependent therefrom are anticipated, in the sense of 35 U.S.C. § 102, by Hochstedler.

Whether claim 23 is patentable, in the sense of 35 U.S.C. § 103, over Hochstedler.

Whether claim 31 is anticipated by Hochstedler.

If the accompanying Amendment is not entered, then there is the additional issue of whether claims 4, 6, 16-18, and 26 distinguish patentably, in the sense of 35 U.S.C. § 103, over Hochstedler as modified by McComb and whether claim 4 complies with 35 U.S.C. § 112.

(vii) ARGUMENT

A. Claims 3 & 24-26 Are In Condition For Allowance

Claim 3 calls for optimizing the presentation on a display screen of objects of a user interface which can be freely positioned and scaled by means of control elements by means of a predetermined calculation rule in a manner that the objects can be automatically changed in dependence on object contents, selected preferred settings, and available space resource, on the display screen, between a minimum readable size and a selected maximum size in such a manner that the optimum filling of the available display screen surface is achieved while suppressing less important details of the object contents while changing the mode of display of the object contents and/or the object as well as while avoiding mutual overlapping of objects, wherein the objects are ordered in a hierarchy, and the ordering the hierarchy of the combined objects can be changed.

Regarding the requirement for optimum filling of the available display screen surface, the Examiner refers the applicant to McComb, column 10, lines 13-20, 35-40 and column 11, lines 55-65. By contrast, these portions of McComb relate to the amount of text to be placed in a dialogue box or button **500**, also referenced as a graphic object. These sections describe how much text and what font size the text which is to be contained in the object can have, and/or the size the graphic object (button) must have to accommodate all of the text. The portions referenced by the Examiner relate to what to do if the text will not fit in the graphic objects or if the graphic objects cannot be made any larger. An overview and better description of the dynamic sizing of McComb is presented starting at column 7, line 12 and extending to column 8, line 17. That is, if the user selects a large font for button 500, the button outline would grow to hold the larger text without truncating it. Similarly, if a small font is selected, the button outline would shrink accordingly. If the button outline or graphic object cannot expand to hold the full text, a shortened form of the text is substituted. This concept is labeled by McComb as a dynamic sizing feature, which dynamic sizing feature causes the button object to be aware of the size of the text within itself so that it adjusts its own size. Thus, McComb adjusts the size of the

button outline or object in order to accommodate the contained text and not for optimally filling the available display screen surface.

Column 10, lines 13-29 of McComb referenced by the Examiner describes sizing the button object to accommodate the text held therein, not to optimize filling of a display screen with window objects. Column 11, lines 55-65 of McComb referenced by the Examiner discusses filling the window objects with text. It does not relate to filling the screen with window objects. See also column 11, lines 54-56 of McComb. Note also that McComb at column 12, lines 1-9 discusses adjusting rows, which connotes text adjustment.

Moreover, these portions of McComb are concerned with expanding or contracting the button object in order to make it fit. This language of McComb does not disclose optimum filling of the available display screen surface, nor does it disclose suppressing less important details of the object content, nor does it disclose changing the mode of the display of the object contents or the object, nor does it disclose avoiding mutually overlapping of objects.

Accordingly, it is submitted that claim 3 and claims 24-26 dependent therefrom are not anticipated by and distinguish patentably over McComb.

B. Claim 24 Distinguishes Patentably Over the References of Record

Hochstedler discloses a number of buttons **45** in Figure 2, for example. It is submitted that if one were to combine the fair teachings of Hochstedler and McComb, one would put labels, analogous to the labels **45** of Hochstedler into the button **500** of McComb and not patient monitoring information as called for in claim 24.

Accordingly, it is submitted that claim 24 distinguishes patentably over the references of record.

C. Claims 25-26 Are Not Anticipated By McComb

Claim 25 calls for designating an object and enlarging the designated object. The button object **500** of McComb can, of course, be selected or designated in order to trigger the corresponding function or operation. However, there is no suggestion in McComb that the button is enlarged in response to being designated.

Rather, the sections of columns 7, 8, and 9 of McComb referenced by the Examiner relate to the initial selection of the dimensions of each button object **500** and not to an enlargement in response to a user designating the button.

Moreover, claim 25 calls for resizing other objects to avoid overlapping without reducing the other objects below the minimum readable size. Again, the sections of McComb referenced by the Examiner relate to the initial creation of the button objects **500** and not to resizing other buttons different from the one which is designated, nor performing such resizing so as to avoid overlapping and without reducing the other buttons below a minimum readable size.

Claim 26 further calls for suppressing detail in other objects to maintain the minimum readable size. Again, the sections of McComb in columns 9 and 10 referenced by the Examiner relate to the creation of the buttons, and not to their designation by a user. Moreover, these portions of McComb do not suggest suppressing detail of one button object after designating a different button object in order to maintain the non-selected object a minimum readable size.

Accordingly, it is submitted that claims 25 and 26 are not anticipated by McComb.

D. Claims 7, 9, 19, 21, & 30 Are Patentable Over the References of Record

Claim 7 calls for optimum filling of an available display screen surface with objects that can be temporarily displayed in an enlarged form in dependence on a given trigger signal which is produced by a controlling element which is defined by object selection/object marking. McComb, by distinction, relates to the design of the button objects **500**. McComb neither suggests optimum filling of the display screen with button windows **500** nor temporary enlargement of a button object **500**. Hochstedler, by contrast, enlarges a dialogue box or pop-up list **160**. There is no suggestion of resizing the buttons **162-164** which are not displayed until the pop-up window **160** is opened or buttons **45**. Buttons **45** and **162-164** are not disclosed by Hochstedler as enlarging, such as when they are selected by a user.

Moreover, there is no suggestion in McComb that the button objects **500** should fill the display screen. Indeed, the Figures of McComb all show empty space around the button objects **500**.

Moreover, claim 7 calls for suppressing less important details of object contents, changing the mode of display object contents or object, and avoiding mutual overlapping of the objects. Again, McComb goes to the design of the button objects **500**. There is no description of changing content or modes once the button objects **500** of McComb are designed. In Hochstedler, when one selects a pop-up window or dialogue box **160**, **180**, less important details of objects are not suppressed, the mode of display of other objects is not changed, and the pop-up or dialogue list **160** overlays and obscures other portions of the display.

The Examiner asserts that column 1, lines 12-15 of Hochstedler disclose enlarging objects in dependence on a given trigger signal. By contrast, this portion of Hochstedler discloses that the graphic user interface may have windows, icons, etc. but makes no suggestion of enlarging such contents upon being selected. Column 3, lines 60-65 of Hochstedler do not describe that which the Examiner attributes to them. Controls **42**, note the phantom double arrows on the right side of the various waveforms, can be used to adjust the location or height of the waveform, i.e., the user can select a larger or smaller display, or can change the location of the various waveforms. The control buttons **45** cause a dialogue box analogous to box **160** to pop-up, which will enable the operator to select among a plurality of arrangements of the various windows for waveforms and other information. As shown in Figure 8, the pop-up dialogue boxes overlay the various windows. It should be noted that there is nothing in the sections referenced by the Examiner that indicate that if one increases the size of one of the waveforms, that it will not overlay the neighboring waveforms. Moreover, selecting the increase/decrease arrow **42** of Hochstedler does not cause said arrow object to enlarge. Rather, it causes an associated waveform to be displayed with greater or lesser overall amplitude. Thus, neither McComb nor Hochstedler disclose temporarily enlarging objects while avoiding mutual overlapping of objects.

Accordingly, it is submitted that claim 7 and claims 9, 19, 21, and 30 distinguish patentably over the references of record. The Examiner has already indicated that claim 29 distinguishes patentably over the references of record.

E. Claim 19 Distinguishes Patentably Over the References of Record

The Examiner cites Ellis for its disclosure of thumbnail images that increase in size (note Figure 10 of Ellis) when touched by a cursor. However, as clearly shown in Figure 10 of Ellis, such enlarged pictures overlay the other thumbnail prints. The other thumbnail prints do not adjust in size or position such that there is no overlapping. Thus, Ellis does not disclose enlarging while avoiding material overlapping.

Accordingly, it is submitted that claim 19 distinguishes yet more forcefully over the references of record.

F. Claims 22, 2, & 23 Are Not Anticipated By and Distinguish Patentably Over Hochstedler

Claim 22 calls for the objects to be automatically changeable in dependence upon object contents, selected settings, and available display resources on the display screen while avoiding overlapping objects. By contrast, in Hochstedler at column 3, lines 28-40 and other locations, the user can select from a number of preselected layouts for the displayed information by using the pop-up window, such as pop-up window **160**, to select a layout to be used. Once selected, such layout puts the various monitored medical information into the corresponding window. There is no automatic change based on the contents of any window, the settings for the parameters, or the available display resources.

In the Examiner's rejection of claim 31, the Examiner concedes that Hochstedler fails to disclose that "objects can be automatically changed, in dependence on the available display resource on the display screen between a minimum readable size and a maximum readable size in such a manner that optimum filling of the available display screen surface is achieved while avoiding mutually overlapping of the objects".

The Examiner directs the applicant's attention to column 1, lines 55-67 of Hochstedler which, the Examiner alleges, shows such automatic changeability. By contrast, this section of Hochstedler suggests that depending on the monitors which

are actually connected to the patient, the system can select among the available display formats.

Claim 22 further calls for in response to one of the objects ceasing to contain relevant patient monitoring information, automatically, without user intervention, substituting another object and repositioning and rescaling this displayed object using the calculation rule. The Examiner refers the applicant to column 5, lines 20-30 and 50-65 and column 4, lines 23-27 of Hochstedler. However, these portions of Hochstedler merely describe selecting among predefined layouts in accordance with the monitors actually connected to the patient. There is no suggestion of automatically substituting objects and repositioning and rescaling the displayed objects.

It might be noted in Figure 2, for example, of Hochstedler that the windows for TEMP8, CO2, and GAS are all blank. Rather than wasting valuable display screen resources, the present application describes repositioning and rescaling, which would minimize the size of such empty displays to provide more resources for other objects which are carrying potentially important physiological information to be enlarged. Further, once such other objects are enlarged, additional related information can also be displayed within them.

Accordingly, it is submitted that claim 22 and claims 2 and 23 dependent therefrom are not anticipated by and distinguish patentably over Hochstedler.

G. Claim 2 is Not Anticipated By Hochstedler

Claim 2 calls for the objects to be arranged in a fixed hierarchy to enable substituting objects based on relative hierarchical level. By contrast, Hochstedler selects among a plurality of predefined display formats in accordance with the monitors which are actually in use.

Accordingly, it is submitted that claim 2 is not anticipated by Hochstedler.

H. Claim 23 is Patentable Over Hochstedler

Claim 23 calls for temporarily enlarging an object in response to touching it with the cursor. By contrast, Hochstedler has buttons which can be selected to open pop-up windows within which, for example, a user can select among the predefined display formats.

Accordingly, it is submitted that claim 23 distinguishes patentably and unobviously over the references of record.

I. Claim 31 is Not Anticipated By Hochstedler

Claim 31 calls for an interface which dynamically varies patient data and displays of the patient data in objects on the display screen by implementing a calculation rule to: (1) substitute, reposition, and rescale displayed objects in response to one of the displayed objects ceasing to contain relevant data, (2) position and scale the displayed objects using the calculation rule to automatically change object contents, settings, and available resources on the display screen, and (3) avoid overlapping of the displayed objects. By contrast, Hochstedler selects among a plurality of predefined display formats based on the monitors which are actually connected to the unit. Further, when Hochstedler opens one of the pop-up boxes, such as box **160** in Figure 8, such pop-up box covers and overlays other displayed information.

Hochstedler does not suggest using a calculation rule to automatically change the contents of an object, the settings, and the available resources on the display screen. Rather, Hochstedler merely selects among a number of predefined layouts based on the physiological monitors that are actually connected to the unit.

Claim 31 calls for substituting, repositioning, and rescaling the displayed objects in response to one of the displayed objects ceasing to contain relevant patient data. Hochstedler does not make an assessment of the relevance of the patient data. Rather, Hochstedler selects among predefined window layouts based on the monitors connected with the unit. It appears that Hochstedler selects a one of the predefined layouts which includes only the physiological monitors that are actually connected to the unit. Such a selection of predefined layouts does not reposition and rescale the displayed objects in response to one of them ceasing to

contain relevant patient data. Note the SPO2 window **51** of Figure 2 which indicates that the probe is off the patient (note receiving relevant patient data), yet it has not been re-sized relative to the adjacent windows. See also the TEMP8, CO2, and GAS windows which are not displaying relevant patient data, yet are being displayed full size. The claimed repositioning and rescaling enables the readout from a monitor which is clearly within acceptable limits to be scaled smaller and for objects which are near or exceeding desirable limits to be displayed larger to catch the attending medical professional's attention. This advantage is not present in Hochstedler.

Claim 31 calls for a display screen and a user interface which receives dynamically varying patient data and displays the data in objects on the display screen, which interface implements a calculation rule. One of the things which the calculation rule does avoid overlapping the displayed objects. By contrast, as clearly illustrated in Figures 8, 10, and 12 of Hochstedler, every time one of the windows or buttons is enlarged or pop-up box actuated, it overlays the other windows which are displaying vital medical data. The presently claimed avoiding such overlap is highly advantageous in that it avoids obscuring potentially vital physiological data from the medical care professional.

The calculation rule also automatically substitutes, repositions, and rescales the displayed objects in response to one of the displayed objects ceasing to contain relevant patient data. By contrast, Hochstedler has a plurality of preselected window layouts which can be selected in accordance with the physiological data monitors that are connected with the graphic user interface.

Further, the calculation rule positions and scales the displayed objects using the calculation rule to automatically change object contents, settings, and available resources on the display screen. By contrast, Hochstedler selects among a plurality of predefined display formats in accordance with the monitors which are connected with the graphic user interface or user preferences.

Accordingly, it is submitted that claim 31 is not anticipated by Hochstedler.

J. Claims 4, 6, & 16-18 Distinguish Patentably Over the References of Record

(This section is relevant if the accompanying amendment is not entered)

Claim 4 calls for positioning and scaling the objects to form at least a first group of objects corresponding to a first patient and a second group of objects corresponding to a second patient, which first and second groups are displayed on the display device. By contrast, the graphic user interface of Hochstedler displays the vital signs of a single patient. If the medical professional wants to view a second patient, it is submitted that the medical professional selects the button shown in the middle of the next to last row of buttons in Figure 2 labeled "view other patient". It is submitted that selecting this button will cause a window to pop-up, overlaying the potentially vital physiological information of the first patient, which window will allow the medical professional to select a different patient to have their physiological data displayed, by itself, on the graphic user interface instead of the data of the first patient.

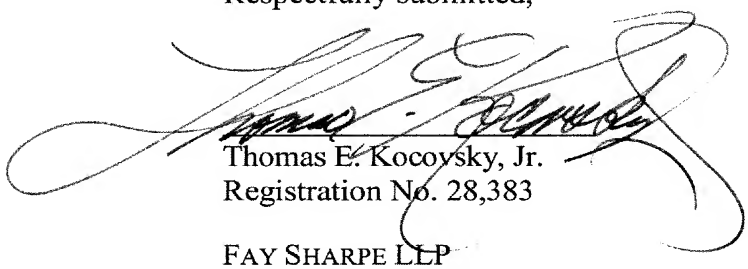
Also, claim 4 calls for avoiding mutually overlapping of the objects. As clearly shown in Figures 8, 10, and 12 of Hochstedler, when a button is selected, the pop-up window clearly overlays and obscures potentially critical physiological data from the medical care professional.

Accordingly, it is submitted that claim 4 and claims 6 and 16-18 are now in condition for allowance. Claims 27 and 28 were previously indicated as containing allowable subject matter, and are thus also asserted to be in condition for allowance.

K. Conclusion

For the reasons set forth above, it is submitted that claims 2, 3, 4, 6, 7, 9, 16-19, and 21-31 are not anticipated by and distinguish patentably and unobviously over the references of record. An early reversal of all of the Examiner's rejections is requested.

Respectfully submitted,



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(viii)(a) CLAIMS APPENDIX (with accompanying Amendment After Final entered)

1. (Cancelled)

2. (Rejected) The method as claimed in claim 22, wherein the objects are arranged within a fixed hierarchy in order to enable substituting objects based on relative hierarchical level.

3. (Rejected) A method of optimizing the presentation on a display screen of objects of a user interface which can be freely positioned and scaled by means of control elements by means of a predetermined calculation rule in such a manner that the objects can be automatically changed, in dependence on object contents, selected preferred settings and available display resource on the display screen, between a minimum readable size and a selected maximum size in such a manner that optimum filling of the available display screen surface is achieved, while suppressing less important details of the object contents and while changing the mode of display of the object contents and/or the object as well as while avoiding mutual overlapping of the objects, wherein the objects are ordered in a hierarchy, an ordering of the hierarchy of combined objects can be changed.

4. (Allowed) A method of optimizing the presentation on a display screen of objects of a user interface, the method comprising:

generating a plurality of objects, each object containing patient information from a medical measuring device;

positioning and scaling the objects with a predetermined calculation rule to form at least a first group of objects corresponding to a first patient and a second group of objects corresponding to a second patient in such a manner that the objects can be automatically changed, in dependence on object contents, selected preferred settings and available display resource on the display screen, between a minimum readable size and a selected maximum size in such a manner that optimum filling of the available display screen surface is achieved, while avoiding mutual overlapping of the object wherein the positioning and scaling includes at least one of:

resizing the objects of the first group relative to the objects of the second group, and

designating one of the groups and enlarging the objects of the designated group;

displaying the first and second groups of objects on a display device.

5. (Cancelled)

6. (Allowed) The method as claimed in claim 4, further including:

automatically substituting the objects among themselves.

7. (Rejected) A method of optimizing the presentation on a display screen of objects of a user interface which can be freely positioned and scaled by control elements by a predetermined calculation rule in such a manner that the objects can be automatically changed, in dependence on object contents, selected preferred settings, and available display resources on the display screen, between a minimum readable size and a selected maximum size in such a manner that optimum filling of an available display screen surface is achieved, while suppressing less important details of the object contents and while changing the mode of display of the object contents and/or the object as well as while avoiding mutual overlapping of the objects, wherein the contents of an object contain static information as well as dynamically variable information and/or commands and various options for processing/manipulation, wherein the objects can temporarily be displayed in enlarged form in dependence on a given trigger signal which is produced by a control element which is defined by object selection/object marking.

8. (Cancelled)

9. (Allowed) The method as claimed in claim 29, wherein respective rectangular surfaces are provided for the display of the objects on the display screen.

10-15. (Cancelled)

16. (Allowed) The method as claimed in claim 4, further including:

generating a cursor on the display screen;

with the cursor, designating one of the objects; and,

temporarily enlarging the designated object.

17. (Allowed) The method as claimed in claim 4, further including:

in response to one of the objects ceasing to contain relevant patient monitoring information, automatically, without user intervention, substituting another object for the one object.

18. (Allowed) The method as claimed in claim 17, further including:

when another object is substituted, automatically repositioning and rescaling the objects using the calculation rule.

19. (Rejected) The method as claimed in claim 7, wherein the trigger signal is produced by a cursor touching one of the objects, such that one of the objects is temporarily enlarged when it is being touched by the cursor and returns to its original size when the cursor no longer touches the one of the objects.

20. (Cancelled)

21. (Allowed) The device as claimed in claim 29, wherein the briefly enlarged object contains patient monitoring information.

22. (Rejected) A method of optimizing a presentation of static and dynamic objects containing patient monitoring information, the method comprising:

generating a plurality of objects, each object containing patient monitoring information from a medical measuring device;

positioning and scaling the objects in a group using a calculation rule in such a manner that the objects are automatically changeable in dependence on object contents, selected settings and available display resources on a display screen while avoiding overlapping objects;

in response to one of the objects ceasing to contain relevant patient monitoring information, automatically, without user intervention, substituting another object and repositioning and rescaling the displayed objects using the calculation rule.

23. (Rejected) The method as claimed in claim 22, further including:

generating a cursor on the display screen;

moving the cursor on the display screen using a user input device;

in response to touching an object with the cursor, temporarily enlarging the touched object.

24. (Rejected) The method as claimed in claim 3, wherein the objects are windows which contain patient monitoring information.

25. (Rejected) The method as claimed in claim 3, further including:

designating an object;

enlarging the designated object;

resizing the other objects to avoid overlapping without reducing the other objects below the minimum readable size.

26. (Rejected) The method as claimed in claim 25, further including:

suppressing detail in the other objects to maintain the minimum readable size.

27-28. (Cancelled)

29. (Allowed) A method of optimizing the presentation on a display screen of objects of a user interface which can be freely positioned and scaled by control elements by a predetermined calculation rule in such a manner that the objects can be automatically changed, in dependence on object contents, selected preferred settings, and available display resources on the display screen, between a minimum readable size and a selected maximum size in such a manner that optimum filling of an available display screen surface is achieved, while suppressing less important details of the object contents and while changing the mode of display of the object contents and/or the object as well as while avoiding mutual overlapping of the objects, wherein the contents of an object contain static information as well as dynamically variable information and/or commands and various options for processing/manipulation, wherein the objects can temporarily be displayed in enlarged form in dependence on a given trigger signal which is produced by a control element which is defined by object selection/object marking wherein a first group of the objects contain information from a first patient and a second group of the objects contained information from a second patient and further including:

selecting one of the first and second groups;

scaling the objects of the selected group relative to the other group by said predetermined calculation rule.

30. (Rejected) The method as claimed in claim 7, wherein the objects are windows which contain patient monitoring information.

31. (Rejected) A device for optimizing a presentation of static and dynamic objects containing dynamically varying patient data, the device comprising:

a display screen;

an interface which receives dynamically varying patient data and displays the patient data in objects on the display screen, the interface implementing a calculation rule to:

substitute, reposition, and rescale the displayed objects in response to one of the displayed objects ceasing to contain relevant patient data, and

position and scale the displayed objects using the calculation rule to automatically change object contents, settings, and available resources on the display screen, and

avoid overlapping of the displayed objects.

(viii)(b) CLAIMS APPENDIX (with accompanying Amendment After Final *Not* entered)

1. (Cancelled)

2. (Rejected) The method as claimed in claim 22, wherein the objects are arranged within a fixed hierarchy in order to enable substituting objects based on relative hierarchical level.

3. (Rejected) A method of optimizing the presentation on a display screen of objects of a user interface which can be freely positioned and scaled by means of control elements by means of a predetermined calculation rule in such a manner that the objects can be automatically changed, in dependence on object contents, selected preferred settings and available display resource on the display screen, between a minimum readable size and a selected maximum size in such a manner that optimum filling of the available display screen surface is achieved, while suppressing less important details of the object contents and while changing the mode of display of the object contents and/or the object as well as while avoiding mutual overlapping of the objects, wherein the objects are ordered in a hierarchy, an ordering of the hierarchy of combined objects can be changed.

4. (Rejected) A method of optimizing the presentation on a display screen of objects of a user interface, the method comprising:

generating a plurality of objects, each object containing patient information from a medical measuring device;

positioning and scaling the control elements with a predetermined calculation rule to form at least a first group of objects corresponding to a first patient and a second group of objects corresponding to a second patient in such a manner that the objects can be automatically changed, in dependence on object contents, selected preferred settings and available display resource on the display screen, between a minimum readable size and a selected maximum size in such a manner that optimum filling of the available display screen surface is achieved, while avoiding mutual overlapping of the objects;

displaying the first and second groups of objects on a display device.

5. (Cancelled)

6. (Rejected) The method as claimed in claim 4, further including:

automatically substituting the objects among themselves.

7. (Rejected) A method of optimizing the presentation on a display screen of objects of a user interface which can be freely positioned and scaled by control elements by a predetermined calculation rule in such a manner that the objects can be automatically changed, in dependence on object contents, selected preferred settings, and available display resources on the display screen, between a minimum readable size and a selected maximum size in such a manner that optimum filling of an available display screen surface is achieved, while suppressing less important details of the object contents and while changing the mode of display of the object contents and/or the object as well as while avoiding mutual overlapping of the objects, wherein the contents of an object contain static information as well as dynamically variable information and/or commands and various options for processing/manipulation, wherein the objects can temporarily be displayed in enlarged form in dependence on a given trigger signal which is produced by a control element which is defined by object selection/object marking.

8. (Cancelled)

9. (Rejected) The method as claimed in claim 7, wherein respective rectangular surfaces are provided for the display of the objects on the display screen.

10-15. (Cancelled)

16. (Rejected) The method as claimed in claim 4, further including:

generating a cursor on the display screen;

with the cursor, designating one of the objects; and,

temporarily enlarging the designated object.

17. (Rejected) The method as claimed in claim 4, further including:

in response to one of the objects ceasing to contain relevant patient monitoring information, automatically, without user intervention, substituting another object for the one object.

18. (Rejected) The method as claimed in claim 17, further including:

when another object is substituted, automatically repositioning and rescaling the objects using the calculation rule.

19. (Rejected) The method as claimed in claim 7, wherein the trigger signal is produced by a cursor touching one of the objects, such that one of the objects is temporarily enlarged when it is being touched by the cursor and returns to its original size when the cursor no longer touches the one of the objects.

20. (Cancelled)

21. (Rejected) The device as claimed in claim 20, wherein the briefly enlarged object contains patient monitoring information.

22. (Rejected) A method of optimizing a presentation of static and dynamic objects containing patient monitoring information, the method comprising:

generating a plurality of objects, each object containing patient monitoring information from a medical measuring device;

positioning and scaling the objects in a group using a calculation rule in such a manner that the objects are automatically changeable in dependence on object contents, selected settings and available display resources on a display screen while avoiding overlapping objects;

in response to one of the objects ceasing to contain relevant patient monitoring information, automatically, without user intervention, substituting another object and repositioning and rescaling the displayed objects using the calculation rule.

23. (Rejected) The method as claimed in claim 22, further including:

generating a cursor on the display screen;

moving the cursor on the display screen using a user input device;

in response to touching an object with the cursor, temporarily enlarging the touched object.

24. (Rejected) The method as claimed in claim 3, wherein the objects are windows which contain patient monitoring information.

25. (Rejected) The method as claimed in claim 3, further including:

designating an object;

enlarging the designated object;

resizing the other objects to avoid overlapping without reducing the other objects below the minimum readable size.

26. (Rejected) The method as claimed in claim 25, further including:

suppressing detail in the other objects to maintain the minimum readable size.

27. (Objected to) The method as claimed in claim 4, further including:

resizing the objects of the first groups relative to the objects of the second group.

28. (Objected to) The method as claimed in claim 4, further including:

designating one of the groups;

enlarging the objects of the designated group.

29. (Objected to) The method as claimed in claim 7, wherein a first group of the objects contain information from a first patient and a second group of the objects contained information from a second patient and further including:

selecting one of the first and second groups;

scaling the objects of the selected group relative to the other group by said predetermined calculation rule.

30. (Rejected) The method as claimed in claim 7, wherein the objects are windows which contain patient monitoring information.

31. (Rejected) A device for optimizing a presentation of static and dynamic objects containing dynamically varying patient data, the device comprising:

a display screen;

an interface which receives dynamically varying patient data and displays the patient data in objects on the display screen, the interface implementing a calculation rule to:

substitute, reposition, and rescale the displayed objects in response to one of the displayed objects ceasing to contain relevant patient data, and

position and scale the displayed objects using the calculation rule to automatically change object contents, settings, and available resources on the display screen, and

avoid overlapping of the displayed objects.

(ix) EVIDENCE APPENDIX

None